

Saturday



Magazine.

Nº 636.

SUPPLEMENT,

MAY, 1842.

PRICE
ONE PENNY.



Cristofon faciem me quacumque tuens. Millefimo ccc.
 Quacumque die in ote mala non moraris. ff mmo

FAC-SIMILE OF THE SAINT CHRISTOPHER, ONE OF THE EARLIEST WOOD ENGRAVINGS.

A BRIEF HISTORY OF THE FINE ARTS. No. V.

HISTORY OF ENGRAVING.

INTRODUCTION.

THE art of Engraving occupies a deservedly high station among human inventions, not only on account of its extensive power of diffusing all kinds of knowledge, but also of extending the domain of the fine arts from the picture-gallery or the hall of sculpture to all classes of the community. By means of this art our rooms may be adorned with the portraits of the greatest men of all ages and all nations. It is by this art also that the paintings of the greatest masters are multiplied, and that the lovers of the polite arts are enabled to enjoy those beauties from which their distant situations seemed to have for ever debarred them; and persons of moderate fortune are thereby enabled to become possessed of much of the spirit and poetry contained in those miracles of art, which seemed to have been reserved for the temples of Italy or the cabinets of princes. "When we reflect moreover, that the engraver besides the beauties of poetical composition, and the artful ordonnance of design, has to express, merely by the means of light and shade, all the various tints of colour and clear obscure,—to give a relief to each figure, and a truth to each object; that he has now to represent a sky serene and bright, and then one loaded with dark clouds; now the pure tranquil stream, and then the foaming sea tempest-driven; that here he has to express the character of the man strongly marked in his countenance, and there the minutest ornament of his dress; in a word, that he has to represent all, even the most difficult objects in nature; we cannot sufficiently admire the vast improvements in this art, and that degree of perfection to which it has at this day arrived."—*Encyclopædia Britannica*.

In the same tone of high appreciation for this art another writer well observes:—"The engraver, like the painter, has certain pictorial elements to be carefully studied and pursued, and adhered to, whatever be the vehicle by which he works. Both artists must, it is obvious, begin their course together in the same school of drawing and of chiaroscuro. Both have the same necessity for perfect acquaintance with anatomy and painting. Both are interested in expressing with truth and vigour, not the outlines only but the surfaces and textures of bodies: as also the changes which light and air, in their innumerable modifications, unfold to the observer of nature. Engraving may not inaptly be called the translation of painting into a language of which the phraseology is in many instances the same as the original; but which in many more retains nevertheless its own proper idiom: and of this idiom a good translator will always be able to avail himself. He never can arrive at such an end except by familiar acquaintance with his means; namely, with the peculiarities of the two languages in question. The work, to be properly translated from the canvass to the copper-plate, must undergo such idiomatic changes as belong to the employment of the new material. In every such work of taste, literal interpretation must not be mistaken for fidelity: otherwise a bald, and spiritless, and unsatisfactory result will be inevitable."—*Encyclopædia Metropolitana*.

SECTION 1. HISTORICAL NOTICE.

Probably no art, music excepted, can claim a priority to that of engraving; and though its inventor is unknown, there is little doubt of its existence long before the Flood. Tubal Cain, the son of Lamech, was the first artificer in metals. It is said of him that he was "the whetter or sharpener of all instruments of copper and of iron," implying thereby his great skill in metallurgy. To what degree of perfection he carried the mechanical part of his profession cannot be discovered; probably his performances were rude and simple in their forms, and rather useful than elegant. As his descendants increased, and the number of workmen multiplied, they became more skilful by experience, and found pleasure in combining use and beauty. The ornamental parts of dress, as clasps, buckles, rings, and diadems, also cups and other household furniture, together with the arms of military chieftains, were probably adorned with the first species of engraving.

Terah, the father of Abraham, is supposed to have been the first man after the Flood who fabricated carved images; and the carving of that remote era often bore a great resemblance

to engraving. Moses when speaking of the art of engraving does not mention it as a new invention, but seems to consider it as too well understood among the Israelites to need any previous description. For though Bezaleel and Aholiab are the first names mentioned professedly as engravers, and of whom it is said that God filled them with wisdom of heart to work all manner of work of the engraver, &c., yet this does not apply the invention of the art to either of them: indeed, previous to the commencement of the workmanship for the tabernacle, it is said of Aaron, that he fashioned the calf he had made with the graving-tool. It is probable that this and many other arts, such as casting or metals, forming of images, carving in wood and stone, working embroidery, &c., were all learned by the Israelites in Egypt. The sacred historian frequently uses terms designed to express the works of the engraver, but it may be doubted how far they resemble the productions of the present time, since they were equally applicable to carving and chasing.

The first specimens of engraving were probably nothing more than rude portraits expressed by simple outlines. The most ancient remains of the art of engraving on metals are the hieroglyphical figures of the Egyptians, many of which were immured as a sort of talisman in the coffins of the mummies. The Phœnicians are thought to have learned the art from the Egyptians: their coins, which are very ancient, prove them to have been tolerable artists. From Phœnicia the art reached Greece, where in Homer's time it was carried to a considerable degree of perfection. Herodotus states that one of the earliest uses to which engraving was applied by the Greeks was the delineation of maps on metal plates. He says that "Aristagoras appeared before the king of Sparta with a tablet of brass in his hand, on which was inscribed every part of the habitable world, the seas and the rivers; and to this he pointed as he spoke of the several countries between the Ionian sea and Susa." The date of this event was the year 500 B.C.

But some of the remains of Etruscan art are thought most ancient of all. In the collection of Sir William Hamilton (now in the British Museum) are many examples of engraving, of which we select one. It is supposed to be the sheath of a parazonium or dagger. It is more than three inches and three quarters wide at the top, and decreases gradually to an inch and a quarter at the bottom.

Its present length is eight inches and a half. The story engraved upon it appears to be taken from Homer. The trophy at the bottom is symbolical of war. Above the trophy two warriors are delineated with a woman who seems to accompany them with great reluctance. Mr. Strutt conceives this may represent Paris with his accomplice conducting Helen to the ship in order to make their escape to Troy; and at the top the messenger, a servant of Menelaus, is relating to his lord the ungrateful behaviour of his Trojan guest. The figures are exceedingly rude, and seem to indicate the very infancy of the art of engraving; they are executed with the graver only, upon a flat surface, and need only to be filled with ink, and run through a printing press (provided the plate could endure the operation) to produce a fair and perfect impression. "The print so produced," says M. D'Ankerville, "would certainly be the most ancient of all that are preserved in the collections of the curious; and demonstrate to us how near the ancients approached to the discovery of this admirable art, which in the present day forms so considerable a branch of commerce. We may indeed say that they did discover it; for it is evident from the valuable relic of antiquity before us, that they only wanted the idea of multiplying representations of the same engraving. After having conquered every principal difficulty, a stop was put to their progress by an obstacle which, in appearance, a child might have surmounted. But in the course of the arts, it is much easier for the workman to conceive what he can do himself than foresee to what length the labours which he executes shall be carried in futurity, or to what unknown uses they may be properly applied. For it happens very rarely indeed that the first inventors of an art have conceived all the subsequent consequences which may be derived from it. It is those rather who follow, and know how to profit from the exertions of others, who generally pass for the inventors." The idea given in this quotation has been acted on: prints have been taken with ink from Etruscan specula in the British Museum,

sufficiently proving the capability of these early engravings to deliver impressions.

The high antiquity of numismatic engraving, or the art of sinking dies from which coins are struck, may be seen by reference to our Supplements on Coins, *Saturday Magazine*, Vol. XVIII., p. 81 and 161. In our articles on Gems and Precious Stones, *Saturday Magazine*, Vol. XVII., we have also noticed the antiquity of seal or gem-engraving. The art of taking impressions from engraved works, by means of ink, or colours, is a discovery of comparatively modern date. The ancients were certainly no strangers to the art of impression in one sense of the term, as is proved by their stamps and signets, their lamps and vases, and their *bass-reliefs* of clay, which being first cast or pressed into form by means of moulds, were afterwards finished by the tools of the modeller, and often in parts marked with letters or ornaments, by the simple operation of stamping. They seem also to have known the use of stamps of separate letters: but the simple operation of pressing one body against another of softer texture, and thereby occasioning a change of form in its surface, is very distinct from the effect produced in the impression taken from wood or copper engraving, where there is no change of form in the surface of the paper, but a change of colour. The ancients were accustomed to use stamps to impress wax, clay, and other soft bodies; but the simple process of covering them with ink, or with a tinted liquid, for the purpose of stamping paper, parchment, cloth, &c. does not appear to have occurred to them.

SECTION 2. DIVISION OF THE SUBJECT.

In accordance with the practice so generally adopted in the arts and sciences, of recurring to the Greek language for technical terms, the art of engraving derives from that source the names of three of its great divisions:—1. Chalcography, or engraving properly so called, is derived from *chalkos*, copper, and *γραφω*, I inscribe. 2. Xylography, from *ξύλον*, wood, and *γραφω*, I inscribe. 3. Lithography, from *λίθος*, a stone, and *γραφω*, I inscribe.

These different modes of engraving comprise various subdivisions, which have been thus enumerated:—

1. *Engraving properly so called.* The design is first traced with a sharp tool, called a *dry point*, upon the plate; and the strokes are cut or ploughed upon the copper with an instrument of an angular form, distinguished by the name of a *graver*.

2. *Etching.* This consists in strokes cut with a point through a thin wax-like preparation, called *etching-ground*, spread upon the copper: these strokes are corroded, or bitten into the copper, with aquafortis.

3. *Etching finished with the graver.* By this method the two former methods are united.

4. *Dotting.* This method is performed by dots without strokes. The dots are executed with the point upon the etching-ground, bitten in with aquafortis, and afterwards harmonized with the graver, by means of which instrument small dots are made, or with the graver alone, as in the flesh and finer parts, unassisted with the point.

5. *Opus mallei*, or the work of the hammer. This method consists in dots first etched and afterwards harmonized with the dry point, performed by a little hammer.

6. *Mezzotinto.* In this method a dark barb or ground is raised uniformly upon the plate, by means of a toothed tool. The design being traced upon the plate, the light parts are scraped off, in proportion as the effect requires, by instruments adapted to the purpose.

7. *Aquatinta.* The outline is first etched, and then a sort of wash laid by the aquafortis upon the plate, produces the effect of drawings in Indian ink, bistre, &c.

8. *Wood engraving.* The design is carefully traced with a pen or pencil, upon a smooth surface of box-wood, and those parts which should be white are carefully hollowed out. This block is afterwards printed by the letter-press printers, in the same manner as a book is printed.

These and some other methods of engraving we propose to treat of hereafter. In proceeding to trace separately the history of each department of the art, a convenient mode of arrangement is suggested, by the materials on which the artist exercises his skill. These are wood, metal, and stone. We begin, therefore, with that which is probably the most ancient method, viz., wood engraving.

But before we enter upon the historical portion of our subject, it may be advantageous to the general reader to be yet more clearly informed of the differences between copper-

plate and wood engraving. The following passage abridged from Mr. Jackson's excellent *Treatise on Wood Engraving* contains very clear distinctions on the subject.

Although both the copper-plate engraver and the wood engraver may be said to *cut* in a certain sense as well as the sculptor and the carver, they have to execute their work *reversed*, that is, contrary to the manner in which impressions from their plates or blocks are seen; and that in copying a painting or a drawing, it requires to be reversely transferred—a disadvantage under which the sculptor and the carver do not labour, as they copy their models or subjects *direct*. Independent of the difference of the material on which the two kinds of engraving are executed, the grand distinction between them is, that the engraver on copper corrodes by means of aquafortis, or cuts out with the burin, or dry point, the lines, stippings, and hatchings, from which his impression is to be produced; while, on the contrary, the wood engraver effects his purpose by cutting away those parts which are to appear white or colourless, thus leaving the lines which produce the impression prominent. In printing from a copper or steel plate, which is previously warmed by being placed above a charcoal fire, the ink or colouring matter is rubbed into the lines or incisions, by means of a kind of ball formed of woollen cloth; and when the lines are thus sufficiently charged with ink, the surface of the plate is first wiped with a piece of rag, and is then further cleaned and smoothed by the fleshy part of the palm of the hand, slightly touched with whitening, being once or twice passed rather quickly and lightly over it. The plate thus prepared is covered with the paper intended to receive the engraving, and is subjected to the action of the rolling or copper-plate printer's press; and the impression is obtained by the paper being pressed into the inked incisions. As the lines of an engraved block of wood are prominent or in relief, while those of a copper-plate are sunk or hollowed, the mode of taking an impression from the former is, so far as relates to the process of inking, precisely the reverse of that which has just been described. The usual mode of taking impressions from an engraved block of wood is by means of the printing-press, either from the block separately, or wedged up in a *chase* with types. The block is inked with the pressman's balls or roller, in the same manner as type, and the paper being turned over upon it, the paper is pressed on to the raised lines of the block, and thus the impression is produced. Impressions from wood are thus obtained by the *on-pressure* of the paper against the raised or prominent lines; while impressions from copper plates are obtained by the *impression* of the paper into hollowed ones. In consequence of this difference in the process, the ink lines impressed on paper from a copper-plate appear prominent when viewed direct; while the lines communicated from an engraved wood block are indented in the front of the impression and appear raised at the back.

The best kind of wood for the practice of this art is box. A clear yellow colour, uniform over the whole surface, is in general the best criterion of the good quality of this wood. Hardness and toughness, without friability or tendency to crumble under the tool, which often proceeds from over-dryness, are indispensable qualities. Beech, pear, apple and other woods were once used, and are still resorted to for large and coarse work. The engraver now works on the cross section of the wood: but it was once the practice to engrave upon the side or *long-way* of the wood.

SECTION 3. ORIGIN OF WOOD ENGRAVING.

To China, the reputed birth-place of so many valuable inventions and discoveries, we are also referred for the invention of wood engraving: and the invention is said to have originated in the peculiar structure of their language; in writing which they do not describe words by means of a combination of letters, but each word is indicated by a distinct character. The number of these characters is so vast that it would scarcely be possible for them to print their books with moveable types. The method adopted by them, according to Du Halde, is as follows. The work intended to be printed is transcribed by a careful writer upon thin transparent paper. The engraver glues each of these written sheets with its face downwards upon a smooth tablet of pear or apple tree, or some other hard wood; and then with gravers and other instruments he cuts the wood away in all those parts upon which he finds nothing traced; thus leaving the transcribed characters ready for printing. In this manner he prepares as many blocks as there are

written pages. He then prints the number of copies immediately wanted. The block to be printed must be placed level and firmly fixed: the printer does not use a press on account of the delicate nature of the paper, but applies his ink to the blocks by means of brushes, taking care not to wet the surface too much, or to leave it too dry, for in the one case the characters would be slurred, and in the other would not print at all: when the block is in a proper state he can print three or four sheets following without dipping his brush into the ink. The impression is made by rubbing the paper while on the block with a small degree of pressure; the paper not being sized, it receives the ink the instant it comes in contact with it. In this way, with great neatness but on one side of the paper only, the Chinese print their books; and this method appears to be of very high antiquity. Mr. Hansard in his *Typographia* gives a most ingenious fac simile of Chinese printing; it is executed after an original block, from which probably a mould was taken for casting it in type metal. The original, which is five-sixths of an inch in thickness, being engraved on both sides, Mr. Hansard prefers to call a wooden leaf. He mentions having seen in the library at the India House several specimens in various stages of the process: some having the paper with the characters traced ready glued to the board; some engraved but never printed from; others showing signs, like the original he has had copied, of much wear; and one very large block of a picture in outline. But all these are only engraved on one side, and have a dove-tail at each end to slide into larger blocks by which they are held firm for the workman's use. Several of their engraving and printing tools are also in the same library, and confirm the account given of their workmanship.

The oriental origin of wooden tablets for preserving public records is indisputable; but on the question how soon the process began of printing from blocks or wooden tablets, antiquity has hitherto been silent. Baron Meerman quotes from a history of China written by Abusaid in Persian, A.D. 1317, the following passage to show that the Chinese of that period had long been familiar with the art. "All the books edited by the persons in question (alluding to three Chinese savans whom he names) are written in a beautiful hand so that each page may be transferred in the same handsome character to the blocks, with which the men of learning are always at great pains to collate their MSS., attesting by a private mark at the back of each block their approbation of it. They next commit these blocks or tables to the best engravers, and finally complete the whole work by numbering the pages." The Persian writer next describes the care with which these tables (somewhat similar in form perhaps to our plates of stereotype) were preserved in cases under the seal of conservators incorporated as a college for the purpose, to whom all applications when a copy was required, were to be made; and on the payment to whom of a stated fee, the copy upon paper, with the seal of the proper functionary attached to it, warranting its genuineness, was granted. So methodical an arrangement certainly argues a long previous custom; but after much careful consideration and research the Baron denies the high antiquity of the art among the Chinese, but thinks that the date of A.D. 930 may be fairly assigned for Chinese impressions from wood.

SECTION 4. INTRODUCTION OF WOOD ENGRAVING INTO EUROPE.

With respect to the time when wood engraving was introduced into Europe nothing has been decided: Marco Polo in his account of China, written after his return to Venice in the year 1295, makes no mention of wood engraving among the marvels of that country. Had the art been unknown at Venice, the Venetian traveller is not likely to have omitted the communication of an art which in China must have met him everywhere, and which to his genius and acuteness must have appeared a strikingly useful and wonderful invention. Mr. Ottley therefore argues that such a communication would in the days of Marco Polo have been old news at Venice, and therefore could find no place among his *marvels*.

In his History of Wood Engraving Papillon gives an extraordinary narrative, which if true would prove the knowledge of wood engraving in Italy so early as year 1285, a date which is at least 130 years earlier than that of any authentic specimens of the art. Papillon's authority is now generally rejected, but we give a portion of his story on account of its curious character, and because it has been the subject of

many disputes among the historians of the art. After a very laboured analysis Mr. Ottley concludes with the learned Zani that the narrative ought to be regarded as authentic: Mr. Singer grants the truth-like appearance of Papillon's tale. the writer of the article on Engraving in the *Encyclopædia Metropolitana* also considers it authentic: but Heineken, Huber, and Bartsch treat it with unqualified contempt.

"It is more than thirty years ago," says Papillon, "since I mislaid three sheets of paper, upon which I had written the descriptions of certain ancient books of wood engravings. For a long time there only remained a very confused idea of them in my mind. I remember to have searched for those papers more than twenty times in the course of writing my book, or upon the occasion of my sending such parts of it as were finished to the press. By accident, on the day of All Saints, in the year 1758, I chanced to discover those manuscript sheets, which had given me so much uneasiness, amongst a bundle of papers for hanging rooms, which my deceased father was at one time accustomed to manufacture. The circumstance gave me the greater pleasure, as, from the name of a Pope, I discovered in these writings an epoch of engraving prints and characters in wood, certainly much more ancient than any hitherto known in Europe; accompanied by a story relative to this subject, at once curious and interesting. I had so far lost the remembrance of all this, that I had not designed to make even the slightest mention of it in this history of my art. This is the proper place to speak of it: but first I must inform my readers how it came to my knowledge.

"When I was a very young man, and employed by my father almost every week-day in different places, to paste or arrange our papers for the hanging of rooms, it happened that, in 1719 or 1720, I was sent to the village of Bagneux, near Mont-Rouge, to a M. de Greder, a Swiss captain, who there possessed a very pretty house. After I had prepared a closet for him he employed me to paste certain papers, in imitation of mosaic, upon the shelves of his library. One day, after dinner, he found me reading in one of his books, and was, in consequence, induced to show me two or three very ancient volumes, which had been lent to him by a Swiss officer, one of his friends, that he might examine them at his leisure: we conversed together about the prints contained in them, and concerning the antiquity of engraving in wood. I will now give the descriptions of these ancient volumes; such as I wrote them in his presence, and as he had the goodness to dictate and explain to me.

"Upon a cartouch or frontispiece, decorated with fanciful ornaments, (which, although Gothic, are far from disagreeable,) and measuring about nine inches in width, by six in height, with, at the top of it, the arms no doubt of the family of Cunio, are rudely engraved the following words in bad Latin, or ancient Gothic Italian, with many abbreviations:—'The heroic actions, represented in figures, of the great and magnanimous Macedonian King, the bold and valiant Alexander: dedicated, presented, and humbly offered to the most holy father, Pope Honorius IV., the glory and support of the Church, and to our illustrious and generous father and mother, by us, Alessandro Alberico Cunio, Cavaliere, and Isabella Cunio, twin brother and sister: first reduced, imagined, and attempted to be executed in relief, with a small knife, on blocks of wood, made even and polished by this learned and dear sister; continued and finished by us together at Ravenna, from the eight pictures of our invention, painted six times larger than here represented: engraved, explained by verses, and thus marked upon the paper to perpetuate the number of them, and to enable us to present them to our relations and friends, in testimony of gratitude, friendship, and affection. All this was done and finished by us when only sixteen years of age.'

"This cartouch," continues Papillon, "is inclosed in a square, formed by a simple black line, one-twelfth of an inch in thickness; a few light hatchings, irregularly placed and executed without precision, indicate the shadows of the ornaments. The whole, like the prints which follow, was taken off, according to all appearances, with a pale tint of indigo in distemper, by passing the hand several times over the paper, after it had been laid on the block; in the simple manner used by the manufacturers of cards in printing their addresses, and the wrappers in which they inclose their packs of cards. The ground or field of the print not having been sufficiently hollowed out in the block in some places, has occasioned the paper, which is of a brownish colour, to be smeared in those parts; in consequence of which the following memorandum was written on the margin beneath,



THE ALPHYNE, OR BISHOP.
From Caeton's Game at Chess.



GROUP OF BEGGARS.
From an early Block Book.

that the fault might be rectified. It is in Gothic Italian, which M. de Greder had great difficulty to decipher, and was, no doubt, written upon this proof, probably the first taken from the block, by the hand of the Chevalier Cunio, or that of his sister :

"The ground of the wooden block must be hollowed deeper, that the paper may not touch it any more in receiving the impression."

"Immediately following this frontispiece are the eight pictures engraved in wood, of the same dimensions and surrounded by a similar fillet: they have also a few light hatchings to indicate the shadows. At the bottom of each of these prints, between the broad line or fillet which bounds the subject, and another parallel line, distant from it about the breadth of a finger, are four Latin verses engraved upon the block, which poetically explain the subject, and above each is its title. The impressions of all of them resemble that of the frontispiece; being of a grey tint and spotty; as if the paper had not been damped or wetted, before it was laid upon the engraved blocks. The figures, which are passable in respect to their outlines, although of a semi-Gothic taste, are sufficiently well characterized and draped; one may perceive by them, that, in Italy, the arts of design were then beginning by degrees to experience melioration. The names of the principal personages represented are engraved under their figures; as Alexander, Philip, Campaspe, and others.

"First subject. Alexander mounted on Bucephalus whom he has tamed. Upon a stone are these words, *Isabel Cunio pinx. et Scalp.*

"Second subject. The passage of the Granicus. Near the trunk of a tree are engraved these words, *Alex. Alb. Cunio Equ. pinx. Isabel Cunio Scalp.*"

In this way, with more or less minuteness, Papillon describes the eight subjects. Upon the blank leaf which follows the last print occur the following words, badly written in old Swiss characters, with ink so pale that they are scarcely legible.

"This precious book was given to my grandfather Jan. Jacq. Turine, a native of Berne, by the illustrious Count de Cunio, magistrate of Imola, who honoured him with his liberal friendship. Of all the books I possess, I esteem it the most, on account of the quarter from whence it came into our family; the science, the valour, the beauty of the amiable twins Cunio, and their noble and generous intention of thus gratifying their relatives and friends. Behold their singular and curious history, in the manner in which it was several times related to me by my venerable father, and according to which I have caused it to be written more legibly than I myself could have done it.

"The young and amiable Cunio, twin-brother and sister, were the first children of the son of the Count di Cunio, and

a noble and beautiful Veronese lady, allied to the family of Pope Honorius IV., when he was only a Cardinal. This young nobleman had espoused this young lady clandestinely, without the knowledge of the relations of either of them, who, when they discovered the affair, caused the marriage to be annulled, and the priest who had married the two lovers to be banished. The noble lady, fearing equally the anger of her father and that of the Count di Cunio, took refuge in the house of one of her aunts, where these twins were born. Nevertheless the Count di Cunio, out of regard to his son, whom he obliged to espouse another noble lady, permitted him to bring up these children in his house, which was done with every instruction and tenderness possible, as well on the part of the Count, as on that of his son's wife, who conceived such an affection for Isabella Cunio, that she loved and cherished her as if she had been her own daughter; loving equally Alessandro Alberico Cunio her brother, who, like his sister, was full of talent, and of a most amiable disposition. Both of them made rapid advances in various sciences, profiting by the instruction of their masters; but especially Isabella, who, at thirteen years of age, was already considered as a prodigy; for she perfectly understood and wrote Latin, composed verses, had acquired a knowledge of geometry, was skilful in music, and played upon several instruments; moreover she was practised in drawing, and painted with taste and delicacy. Her brother urged on by emulation, endeavoured to equal her; often, however, acknowledging that he felt that he could never attain so high a degree of perfection: he himself was, nevertheless, one of the finest young men of Italy; he equalled his sister in beauty of person, and possessed great courage, elevation of soul, and an uncommon degree of facility in acquiring and perfecting himself in whatever he applied to. Both of them constituted the delight of their parents, and they loved each other so perfectly, that the pleasure or chagrin of the one or the other was divided between them. At fourteen years of age this young gentleman could manage a horse, was practised in the use of arms, and in all exercises proper for a young man of quality; he also understood Latin, and had considerable skill in painting.

"His father having, in consequence of the troubles of Italy taken up arms, was induced, by his repeated solicitations, to take him with him the same year, viz., at the age of fourteen, that under his eyes he might make his first campaign. He was intrusted with the command of a squadron of twenty-five horse, with which, for his first essay, he attacked, routed, and put to flight, after a vigorous resistance, almost two hundred of the enemy: but his courage having carried him too far, he unexpectedly found himself surrounded by many of the fugitives; from whom, nevertheless, with a valour not to be equalled he succeeded in dis-

engaging himself, without sustaining any other injury than that of a wound in his left arm. His father, who had flown to his succour, found him returning with one of the standards of the enemy, with which he had bound up his wound: he embraced him full of delight at his glorious achievements, and, at the same time, as his wound was not considerable, and as he was desirous to reward such great bravery upon the spot, he solemnly made him a knight, dubbing him in the same place where he had given such great proofs of his extraordinary valour. The young man was so transported with joy at this honour, that, wounded as he was, he instantly demanded the permission to go and see his mother, that he might inform her of the glory and honour which he had just acquired; permission was granted by the count, the more readily as he was glad to have this opportunity of testifying to that noble and afflicted lady (who had always remained with her aunt a few miles from Ravenna), the love and esteem which he ever continued to entertain for her.

"The young knight therefore immediately set out escorted by the remains of his troop, and with this equipage he arrived at the residence of his mother, with whom he staid two days; after which he repaired to Ravenna to show a similar mark of respect to the wife of his father, who was so charmed by his noble actions, as well as by his attentions towards her, that she herself led him by the hand to the apartment of the amiable Isabella. He remained a few days in this city; but impatient to return to his father, that he might have an opportunity of distinguishing himself in new exploits, he set off before his wound was yet healed. But the count would not suffer him to serve until his arm was perfectly healed. It was soon after this that Isabella and he began to compose and execute the pictures of the actions of Alexander. He made a second campaign with his father, after which he again worked upon these pictures, conjointly with Isabella, who applied herself to reduce them and to engrave them on blocks of wood. After they had finished and printed these pieces, and presented them to Pope Honorius and to their other relations and friends, the cavalier joined the army for the fourth time, but this last campaign was fatal to him: he fell covered with wounds, by the side of a friend who accompanied him, and who, whilst endeavouring to defend him, was also dangerously wounded. Isabella was so much affected by the death of her brother, which happened when he was not yet nineteen, that she languished and died when she had scarce completed her twentieth year. The mother also died of grief for the death of her beloved children. The Count di Cunio, who had been deeply afflicted by the death of his son, could scarcely support that of his daughter. Even the Countess di Cunio, who loved Isabella with great tenderness, fell ill of grief for her loss, and would have sunk under it, had she not been supported by the manly fortitude of the count. Happily the health of the countess was by degrees re-established. Some years afterwards, the generous Count di Cunio gave this copy of the actions of Alexander bound* as it was, to my grandfather; and I have caused the leaves of paper to be inserted, upon which, by my orders, this history was written."

In resuming his observations Papillon remarks, "that from the name of Pope Honorius IV. engraved on the frontispiece of these ancient prints of the actions of Alexander, it is most certain that this precious monument of engraving on wood, and of the art of taking impressions, was executed between the years 1284 and 1285†; because that pope, to whom it was dedicated, governed the church only for the space of two years; that is, from the second of April, 1285, to the third day of the same month in the year 1287: the epoch, therefore, of this ancient specimen of engraving is anterior to all the books, printed in Europe, that have been hitherto known. M. Spirichtvel, the officer, who was the possessor of this copy, and the friend of M. de Greder, was one of the descendants of Jan. Jacq. Turine, who was the ancestor of his mother. The death of M. de Greder having taken place many years ago, I am unable to learn where this book is at present to be seen, so that its authenticity may be established to the satisfaction of the public, and that which I have written be confirmed. It is, however, very probable that the copy which was given to

Pope Honorius may be preserved in the library of the Vatican at Rome."

It is unfortunate for the truth of this story that no copy of the book has been discovered. Mr. Chatto (who contributed the historical portion to Mr. Jackson's work) endeavours on internal evidence to disprove the truth of this romantic narrative. He says, "It is remarkable that this singular volume should afford not only specimens of wood engraving earlier by 130 years than any which are hitherto known, but that the binding of the same period as the engravings should also be such as is rarely if ever to be met with till upwards of 150 years after the wonderful twins were dead."

One of the most authentic documents in which positive mention is made of wood engraving is a decree of the government of Venice, found among the archives of the old company of Venetian painters, bearing date October the 11th, 1441, prohibiting the importation into that city of works, "printed or painted on cloth, or on paper, that is to say, altar-pieces, or images and playing cards, and whatever other work of the said art done with a brush and printed." The reason for this decree was for the protection of native artists, "who are a great many in family," in order that they "may find encouragement, rather than foreigners." This decree is cited as good evidence that wood engraving was practised at Venice as early as the commencement of the fifteenth century, for it must have been known and practised many years before 1441, when, according to that document, "the art and mystery of making cards and printed figures" had fallen to total decay. Mr. Ottley thinks that the art had from a very early period been practised by the Venetians, "who may easily be supposed to have learned it in the course of their commerce with the Chinese, and that through their means it became at length promulgated in various parts of Europe;" that prior to 1400, the Venetian engravers continued to be more numerous, and perhaps more skilful than those of other countries, until some time after that period; but that at length wood engraving became improved by the artists of other parts, and that these, after the use of playing cards was become general, so increased in number and dexterity, as to be able to furnish their cards and printed figures at a lower price, and of a better quality, than the Venetian artists themselves could do: hence the interference of the Venetian government.

The silence of old writers on this art renders it probable that for a very long time the nature of the art remained a secret, known to few except those who practised it, and that it was commonly confounded with painting or drawing. The representations of saints, and other devotional subjects, which the first wood engravers produced, were rudely engraved and printed in outline, and then daubed over with a few gay colours, in the manner practised so long afterwards in Germany and the Low Countries, so as to catch the eye of the vulgar, who no doubt considered them as pictures. Being manufactured at small cost they were sold at a cheap rate, and perhaps sometimes distributed gratis to the common people, who hung them up in their dwellings. Hence (as Mr. Ottley ingeniously argues) they were little esteemed by the richer classes, who considered them as paintings of an inferior kind, and themselves employed artists of eminence, to execute more finished pictures of such devotional subjects as they required, on vellum or on board. It is therefore not extraordinary that the ancient use of wood engraving should have escaped the notice of contemporaneous historians, since many of them were perhaps unconscious even of the existence of such an art; and those who were acquainted with it considered it as an art of small importance.

The inhabitants of Germany and the Low Countries seem to have adopted this art with eagerness: their productions probably began to constitute a branch of their commerce soon after 1400, for "they used to send their playing cards in large bales, as well into Italy, as to Sicily, and other parts, by sea, receiving in return spices and other merchandize." The term *Kartenmacher*, or cardmaker, is mentioned in the *Burger-buche* of Augsburg, in 1418, and in that of Nuremberg, in 1433 and 1438. The artists who engraved in wood were called *Formschneider*, or figure-cutter, an appellation by which they are still known. Another set of artists were called *Briefmaler*, or painters of cards, and according to Heineken (who supports the theory that wood engraving owes its origin to cards,) the process adopted by them was much the same as the modern stencilling: thin plates of metal were cut into holes or patterns,

* Papillon in a note to this passage, says, "The ancient and Gothic binding is made of thin tablets of wood, covered with leather, and ornamented with flowered compartments, which appear simply stamped and marked with an iron a little warmed, without any gilding. It has not escaped the attack of the worms; the cover has been eaten by them into holes in many places."

† Mr. Ottley remarks that Papillon should have said 1285, or 1286. It is possible indeed that the work was begun in 1284.

which served as a guide in finishing the cards with colours. The persons who manufactured cards sold also the prints of saints, the demand for which was excessive during the fourteenth and at the commencement of the fifteenth century.

The common people of Suabia and the adjoining districts were accustomed to call the prints of sacred subjects disseminated among them by the name of *Helgen* or *Helglein*, i. e., saints, or little saints, a term derived from the German word *Heiligen*, or Saints, and in course of time the term came to be applied to prints generally. In France also these cuts of sacred subjects were called *dominos*.

The earliest print bearing a date was discovered by Heineken, in the Chartreuse at Buxheim, in Suabia, one of the most ancient convents in Germany: the subject is Saint Christopher carrying the infant Jesus across the sea; opposite to him is the hermit holding up his lantern to give him light; and behind is a peasant, seen in a back view, carrying a sack, and climbing the ascent of a steep mountain. This piece is of a folio size, and coloured in the manner of our playing cards; at the bottom is a Latin inscription*, with the date 1423. This print was found pasted in the inside of one of the covers of a manuscript in the Latin language, of the year 1417, and is now in the splendid library of Earl Spencer, where it is preserved in the same state in which Heineken discovered it. A fac-simile of this cut is given in our frontispiece. Within the other cover of the same manuscript another wood print is pasted, representing "the Annunciation of the Virgin." Mr. Ottley considers that it is the production of the same artist; that both prints were probably printed originally on the same paper, for the purpose of being folded and inserted in a book of devotion, when, in common with many other small portable altarpieces of those times, the two subjects would have faced each other. They are of the same height, and very nearly of an equal breadth; are printed upon tolerably thick paper, with black oil colour, and are tinted, apparently at the time, with precisely the same colours.

Though these prints were found in Germany, they bear so striking a resemblance to the style of the old Italian Schools, that it has been suggested that they may be the productions of Venice, or of some district of the territory then under the dominion of that republic. "Those who are acquainted with the style of art which, founded by Giotto, and promulgated by his school, prevailed more or less throughout Italy, from the beginning of the fourteenth until towards the middle of the fifteenth century, will, I think, discover this similitude in the general arrangement of the composition—the simplicity and lightness of the architecture, with unornamented circular arches, supported by a single slender pillar and pilasters—the peaceful attitude of the Virgin, and especially her drapery, which, wholly unlike the angular sharpness, the stiffness and the flutter of the ancient German School, is divided into a few easy folds by lines of gentle curvature."

The next print in point of antiquity is a wood engraving of a quarto size, found in the Abbey of St. Blasius, in the Black Forest. It represents the martyrdom of St. Sebastian, and is dated 1437; under it is a prayer (doubtless printed from the same block) and a repetition of the date.

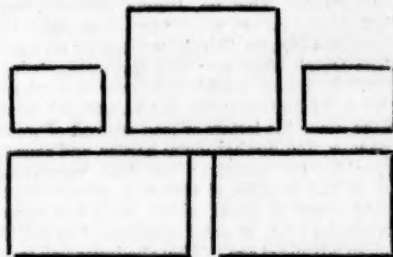
The old German wood engravers appear to have manufactured prodigious quantities of these religious cuts, which were dispersed and lost among the laity, but preserved in part by the monks, who pasted them into the first printed books, with which they ornamented their libraries. By extending the principle of impression, it was not difficult for the artists to engrave historical subjects, and entire sets of prints, and to accompany them with explanations of their meaning, engraved in the same manner on wood; whether for the instruction of youth, or for the purposes of devotion. And thus originated our first books printed from engraved wooden blocks, a practice to which it is difficult to assign a

date. Mr. Ottley surmises that the commencement of that practice cannot be later than 1420, and that it was probably in some parts used earlier. Many writers suppose that this invention of block printing gave rise to the idea of printing with moveable characters, and to the consequent discovery of typography.

From the time that wood engraving became connected with the manufacture of books, may be dated its more general diffusion and improvement; the productions of the wood engraver collected in the form of volumes became less exposed to loss or injury, and many of them are preserved to our own time.

Antiquarian writers are not agreed as to which is the most ancient of these block books. One of the earliest is certainly the "Biblia Pauperum," or the Bible of the Poor. This work consists of 40 leaves, of a small folio size, printed by means of friction from the same number of engraved blocks of wood, on one side of the paper only; in which respect, as well as in the brown tint, apparently unmixed with oil, with which the prints are taken off, it resembles most of the other early block-books. These printed pages are placed two by two, facing each other; the second print being opposite to the first, the fourth to the third, and so on; by these means the blank sides of each two leaves are likewise opposed to each other, and being pasted together give to the whole the appearance of a book printed in the ordinary way on both sides the paper.

The prints differ a little in size, being from 9½ inches to 10½ in height by about 7½ broad. Each print contains three sacred historical subjects disposed in compartments side by side, and four half-length figures of prophets, and other holy men, in niches, two of them above and two beneath the central subject; as shown in the following diagram.



The inscriptions, which are written in Latin in rhymed couplets, commence at the top of each print, in the vacancies on either side the two half figures in niche by the texts of the Bible from which the subjects are taken. The prophets and saints have underneath them their names, and additional inscriptions relative to the stories represented are introduced on labels and in other spaces below. The central compartments represent the history of the New Testament; those on either side, stories from the Old Testament, typical of, or alluding to, the central subjects. Each print, to guide the bookbinder in placing it, is marked with a letter of the alphabet immediately over the central subject. The first twenty prints are marked from A to V; after which a second alphabet commences, for the last twenty prints, the letters of which are distinguished from those of the former, by being placed between two points, thus 'A'.

The *Biblia Pauperum* is one of the block books most frequently referred to, as a specimen of that kind of printing from wood blocks which preceded typography. This work, the text of which is in abbreviated Latin, is frequently called "The Poor Man's Bible" and is supposed to have been "printed for the use of the poor in an age when even the rich could scarcely read their own language." But by comparing it with various other works for the use of preachers, Mr. Chatto supposes its right title to be "*Biblia Pauperum Predicatorum*" or the Poor Preacher's Bible, being in fact a collection of wood cuts to warm the preacher's imagination, and texts to assist his memory.

Among the earliest results of block-printing may be reckoned several editions of the grammatical primer, called *Donatus*, from a celebrated grammarian of that name, who lived in the middle of the fourth century.

The reader may form some idea of the mode of illustrating block books by the fac-simile given at page 213. The group, which is characteristic, is copied from one of the earliest block books, entitled *Sancti Johannis Apocalypsis*. A very fine and complete copy of this rare work is in Earl Spencer's library: it is bound in ancient red morocco.

* The two verses at the foot of the cut,

Cristofori faciem die quacunque tuers,
Illa nempe die morte mala non morieris,

May be translated as follows:—

Each day that thou the likeness of St. Christopher shall see,
That day no frightful form of death shall make an end of thee.

They allude to a popular superstition, common at that period in all Catholic countries, which induced people to believe that the day on which they should see a figure or image of St. Christopher they should not meet with a violent death, nor die without confession.—JACKSON'S *Treatise on Wood Engraving*.

SECTION 5. ORIGIN OF TYPOGRAPHY.

The early history of wood engraving is so closely interwoven with that of printing, that the progress of the one necessarily leads to a notice of the origin of the other. This subject, however, has been so much controverted and discussed by antiquarian writers that we cannot enter into it. It will be sufficient for our purpose to state briefly the pretensions of the four persons whose names occur most frequently in these controversies; viz., Lawrence Coster, (or Janszoon,) of Haarlem; John Gutenberg, (paternally Gensfleisch,) of Strasburg; John Fust, (or Faust,) of Mayence; and Peter Schoeffer, (in Latin, Opilio,) of Gernsheim.

The *Speculum Humane Salvationis* is ascribed, upon the authority of Hadrian Junius, a Dutch writer of the sixteenth century, to the press of Lawrence Coster of Haarlem, who he assures us was the true inventor of typography, notwithstanding that a contrary opinion in favour of the pretensions of the printers of Mentz was generally received. The account of Junius, which is given in Latin, is in substance as follows:

He relates that about 128 years before he wrote, this Lawrence Coster resided in a large house situated opposite the royal palace at Haarlem, which was still standing. That Coster, during his afternoon walks in the vicinity of the city began by amusing himself with cutting letters out of the bark of the beech-tree: and with these, one after another, the letters being inverted, he printed small sentences for the instruction of his grand-children. That being a man of genius and research, and finding the ink then commonly used apt to spread, he afterwards discovered, with the assistance of his son-in-law, a more glutinous kind of ink, with which he succeeded in printing entire pages with cuts and characters. That he, Junius, had seen specimens of this kind printed on one side of the paper only, in a book entitled *Speculum Nostre Salutis*, written by an anonymous writer in the Dutch language; the blank pages being pasted together that the leaves might turn over like those of an ordinary book, without showing the vacancies. That afterwards Coster made his letters of lead instead of wood; and lastly of pewter, finding that metal harder, and consequently more proper for the purpose; and that various drinking cups, made of the remains of this old type, were still preserved in the aforesaid house, where, but a few years before, Coster's great nephew, or great grandson, Gerard Thomas, had died at an advanced age. That the invention in question soon meeting with encouragement, it became necessary to augment the number of hands employed; which circumstance proved the first cause of disaster to the new establishment; for that one of the workmen, named John (whom Junius seems to suspect might have been Fust or Faust) as soon as he had made himself sufficient master of the art of casting the type, and joining the characters (notwithstanding he had given an oath of secrecy), took the earliest opportunity of robbing his master of the implements of his art; choosing for the completion of his purpose, the night preceding the feast of the Nativity, when the whole family, with the rest of the inhabitants of the city, were at church, hearing midnight mass. That he escaped with his booty to Amsterdam, thence to Cologne, and lastly that he took up his residence at Mentz, where he established his printing press; from which within the following year, 1442, were issued two works printed with the characters which had been before used by Coster at Haarlem; the one entitled *Alexandri Galli Doctrinale*, the other *Petri Hispani Tractatus*.

This account Junius assures us he had from several old gentlemen who had filled the most honourable offices in the city, and who themselves had received it from others of equal respectability and credit, as a well-founded tradition; as a lighted torch passes from one hand to another without being extinguished. He states that he well remembers that Nicholas Gabius, the tutor of his youth, who was an old gentleman of very tenacious memory, used to relate that when he was a boy, he had often heard one Cornelius, then an old man upwards of eighty years of age, who had been a bookbinder, and in his youth had assisted in the printing office of Coster, describe with great earnestness the various trials and experiments made by his master in the infancy of the invention: upon which occasions he would even shed tears, especially when he came to the story of the robbery committed by one of the workmen, which he related with great vehemence; cursing those nights in which, as he said, for some months, he had slept in the same bed with so vile a miscreant;

and protesting that he could with the utmost pleasure execute the thief with his own hands, if he had been still alive. Junius says that this relation corresponded with the account which Quirinus Talesius, the burgomaster, confessed to him he had heard from the mouth of the same old bookbinder.

The next claim to the honour of this invention, and which is most generally admitted, is that of John Gutenberg, of Mayence, about the year 1438. The history of the discovery, which is given in Latin by the Abbot John Trithemius, an old German chronicler, is as follows:

"At this time, in the city of Mentz, on the Rhine, in Germany, and not in Italy, as some have erroneously written, that wonderful and then unheard-of art of printing and characterizing books was invented and devised by John Gutenberg, citizen of Mentz, who, having expended most of his property in the invention of this art, on account of the difficulties which he experienced on all sides, was about to abandon it altogether; when, by the advice and through the means of John Fust, likewise a citizen of Mentz, he succeeded in bringing it to perfection. At first they formed or engraved the characters or letters in written order on blocks of wood, and in this manner they printed the vocabulary called a 'Catholicon.' But with these forms or blocks they could print nothing else, because the characters could not be transposed in these tablets, but were engraved thereon as we have said. To this invention succeeded a more subtle one, for they found out the means of cutting the forms of all the letters of the alphabet, which they called matrices, from which again they cast characters of copper or tin of sufficient hardness to resist the necessary pressure, which they had before engraved by hand. And truly, as I learned thirty years since from Peter Schoeffer de Gernsheim, citizen of Mentz, who was the son-in-law of the first inventor of this art, great difficulties were experienced after the first invention of this art of printing, for in printing the Bible, before they had completed the third quaternion or gathering of four sheets, four thousand florins were expended. This Peter Schoeffer, first servant and afterwards son-in-law to the first inventor, John Fust, as we have said, an ingenious and sagacious man, discovered the more easy method of casting the types, and thus the art was reduced to the complete state in which it now is. These three kept this method of printing secret for some time, until it was divulged by some of their workmen, without whose aid this art could not have been exercised: it was first developed at Strasburgh, and soon became known to other nations. And thus much of the admirable and subtle art of printing may suffice—the first inventors were citizens of Mentz. These three first inventors of printing, namely, John Gutenberg, John Fust, and Peter Schoeffer his son-in-law, lived at Mentz, in the house called Zum Jungen, which has ever since been called the printing-office."

One of the earliest and most celebrated results of the union of typography and wood engraving is the Psalter printed in 1457, by Fust and Schoeffer. In a colophon, (the sentence frequently added by the early printers to the conclusion of a work) the discovery of the art of printing is announced in terms of congratulation. This Psalter is printed on vellum; the psalms are in larger letters than the hymns; and the ink is uncommonly black. The capital letters are cut in wood; the largest of these, which are black, red, and blue, must have passed, it is supposed, three times through the press. This work is now very rare, not more than six or seven copies being known to exist.

Mr. Ottley remarks, that after the establishment of typography the wood engravers of Italy, and especially those of Venice, began to exert themselves with diligence; in order that their cuts, no longer exclusively destined to be distributed to the common people in commemoration of the miracles of their patron saints, might possess that beauty of execution necessary to render them truly ornamental to the printed volumes they were employed to illustrate or adorn. The progressive improvement of wood engraving, due most probably to its connection with typography, remains to be considered.

LONDON:

JOHN WILLIAM PARKER, WEST STRAND.

PUBLISHED IN WEEKLY NUMBERS, PRICE ONE PENNY, AND IN MONTHLY PARTS, PRICE SIXPENCE.

Sold by all Booksellers and News-vendors in the Kingdom.